

### **Remarks**

Claims 14-20, 26-28, 42, 52, and 53 are pending in this application. In an Office Action dated November 16, 2005, the Examiner rejected claims 14-20, 26-28, 42, 52, and 53 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,526,433 to Zakarauskas *et al.* (Zakarauskas). Applicant respectfully disagrees with the Examiner's rejections and requests reconsideration in light of the following remarks.

Claim 1, as amended, provides a method for positioning a receiver array of a signal processing system. At least one location of sources of at least one signal of interest is identified. A position of at least one first receiver element of a receiver array is determined relative to the at least one location. The first receiver element receives the signal of interest first in time. A position of at least one second receiver element of the receiver array is determined relative to the first receiver element. The second receiver element receives the signal of interest second in time. A spacing between the first and second receiver elements provides at least one time delay that supports generation of a plurality of linear combinations of the signal of interest and a sum of interfering sources. The position of the second receiver element also supports a first sum of interfering sources from the first receiver element resembling a second sum of interfering sources from the at least one second receiver element.

The Examiner rejected claim 1 as anticipated by Zakarauskas. Zakarauskas discloses aiming a self-steering microphone system based solely on a "selected sound source." (See, Abstract). There is no teaching or suggestion in Zakarauskas for any sums of interfering sources or for positioning elements based in any way on sums of interfering sources. The Examiner's sole support that Zakarauskas discloses sums of interfering sources is "116, 118." The sole disclosure of these "signals," as the Examiner describes them, is in column 4, lines 41-46, as follows:

In signal 114<sub>1</sub> and 114<sub>2</sub> are compared in the comparer [116] and the signals aligned by the time delay system 118 so that the peak A<sub>1</sub> and A<sub>2</sub> are in alignment and the difference in the time required to align the peaks A<sub>1</sub> and A<sub>2</sub> (or B<sub>1</sub> and B<sub>2</sub> or C<sub>1</sub> and C<sub>2</sub>) is used in control 120 to control the steering system 122 which in turn control the drive motor 30.

Zakarauskas is only concerned with using the signals of interest to steer the microphone system.

Zakarauskas does not teach, or even fairly suggest, the use of sums of interfering sources for any purpose whatsoever. Claim 14 is patentable over Zakarauskas. Claims 15-20, which depend from claim 14, are therefore also patentable.

Independent claim 52 provides, *inter alia*, for a first sum of interfering sources from the first receiver element resembling a second sum of interfering sources from the second receiver element. The Examiner rejected claim 52 in the same argument as with claim 14. For the reasons provided above, claim 52 is patentable over Zakarauskas.

Independent claim 26 provides a method for extracting at least one signal of interest from a composite audio signal. A position of at least one first receiver element of a receiver array is determined relative to at least one location of a source of the signal of interest. A position of at least one second receiver element of the receiver array is determined relative to the first receiver element. The second receiver element receives the signal of interest second in time. A spacing between the first and second receiver elements allows for generation of a plurality of linear combinations of the source signal and a sum of interfering sources. The spacing also allows registration of a sum of interfering sources so that a first sum of interfering sources from the first receiver element resembles a second sum of interfering sources from the second receiver element. The composite audio signal is received using the receiver array and the signal of interest is extracted using at least one inter-receiver element differential in signal amplitude.

In rejecting claim 26, the Examiner referred to "signals to 116 and 118" in Zakarauskas as teaching Applicant's sums of interfering sources. As argued above, Zakarauskas neither teaches nor fairly suggests Applicants' sums of interfering sources. Claim 26 is patentable over Zakarauskas. Claims 27 and 28, which depend from claim 26, are therefore also patentable.

Independent claim 53 provides, *inter alia*, for spacing between the first and second receiver elements that allows registration of a sum of interfering sources so that a first sum of interfering sources from the first receiver element resembles a second sum of interfering sources from the second receiver element. The Examiner rejected claim 53 in the same argument used to reject claim 26. As argued above, Zakarauskas neither teaches nor

fairly suggests any sums of interfering sources. Claim 53 is therefore patentable over Zakarauskas.

Independent claim 42 provides an audio signal processing system including at least one signal processor and at least one microphone array coupled among at least one environment and the at least one signal processor. The microphone array includes at least one microphone element and at least one second microphone element. Spacing between the first and second microphone elements allows for similarity between a first sum of interfering sources from the first receiver element and a second sum of interfering sources from the second receiver element.

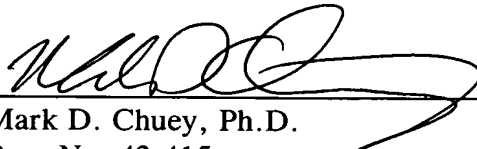
The Examiner provided no argument in support of rejecting claim 42. Claim 42 is patentable over Zakarauskas for at least the reasons provided above.

Claims 14-20, 26-28, 42, 52, and 53, as amended, are pending in this application. Applicant believes these claims meet all substantive requirements for patentability and respectfully request that this case be passed to issuance. No fee is believed due by filing this paper. However, any fee due may be withdrawn from Deposit Account No. 02-3978.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,

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